Anastasia Pentari

Phone: (+30) 6971950463

Email address: anpentari@iesle.forth.gr , anpentari@gmail.com

Location: Heraklion, Crete, Greece

LinkedIn profile: https://www.linkedin.com/in/anastasia-pentari-228179147/

Professional experience

Postdoctoral Researcher, Foundation for Research and Technology-Hellas (FORTH), Crete, Greece

December 2021 – current

- Academic Background: Strong foundation in applied statistics, advanced mathematics, and computer science principles, complemented by specialized research in machine learning and deep learning
- Machine Learning & Model Design: Extensive experience in designing, developing, and optimizing impactful ML/DL models, with a proven track record of applications in biomedical research, speech emotion recognition, and multimodal data analysis
- Proficient in Matlab, with additional expertise in Python and R for scientific programming, statistical modeling, and algorithm development
- Signal and Graph Signal Processing: Specialized in the development of graph-based computational frameworks and advanced signal processing methods for speech, voice, and biomedical data
- Advanced skills in feature extraction, statistical analysis, and interpretation of diverse datasets, including 1D and 2D datasets (DW-MRI, EEG, rs-fMRI, PSG, radar-based, and speech-based data)
- Experienced in managing, mentoring, and guiding team members within interdisciplinary and cross-functional research environments, fostering innovation and effective knowledge transfer
- Active contributor to National and European research programs

Teaching under the program: "Acquisition of Academic Teaching Experience by Early-Career Researchers Holding a PhD at the Technical University of Crete (TUC)

- 2025-2026: Signals & Systems

Teaching Assistant, Hellenic Mediterranean University (HMU), Department of Computer Engineering

February 2022 - 2025

- Management and teaching of the undergraduate lessons:

    o (2024-2025) Speech and Natural Language Processing (7.015)

    o (2023 - 2024) Advanced Topics in Biomedical Engineering (9.014)

- (2022-2024) Contribution to Postgraduate Lessons as TA to Prof. Manolis Tsiknakis

Education

- **Ph.D Diploma (7.73), University of Crete, Computer Science Department, Crete, Greece**

February 2016 - July 2022, Under the Supervision of Prof. Panagiotis Tsakalides

Ph.D. Thesis Title: *"Graph signal processing and recurrence quantification techniques for the analysis of biomedical signal ensembles"*

- **M.Sc (9.67), Technical University of Crete, Department of Electronic Engineering, Crete, Greece**

September 2013 - September 2015, Under the Supervision of Michalis Zervakis

M.Sc. Thesis Title: *"Development and Implementation of video algorithms for the evaluation of sediments in river flow"*

- B.Sc (6.81), Technical University of Crete, Department of Electronic Engineering, Crete, Greece

September 2005 - June 2013, Under the Supervision of Michalis Zervakis

B.Sc. Thesis Title: *"Methods of detection and identification of motion in multiple cameras"*

Languages

Greek (mother language)

English: Proficiency in Michigan (C2) and Edexcel Level 5

Fellowships

- HFRI PhD Fellowship grant no. 902, funded by the Hellenic Foundation for Research and Innovation (HFRI) and the General Secretariat for Research and Technology (GSRT) (2017-2019).

- Grant no. 1725 Stavros Niarchos Foundation and FORTH-Hellas within the framework of ARCHERS program (2020-June 2021).

- Grant no. MIS 5004457, funded by Greece and the European Union (European Social Fund) in the context of the Youth Employment Initiative through the Operational Program for Human Resources Development, Education and Lifelong Learning.